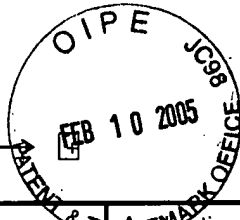


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HDP/SB/21 based on PTO/SB/21 (08-00)



FW
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TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

| | |
|------------------------|-------------------------------|
| Application Number | 10/608,086 |
| Filing Date | June 30, 2003 |
| Inventor(s) | William E. RUSSELL, II et al. |
| Group Art Unit | 3641 |
| Examiner Name | Rick Palabrica |
| Attorney Docket Number | 24GA05998-7 |

ENCLOSURES (check all that apply)

| | | | | |
|---|--|--|---------|--|
| <input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input checked="" type="checkbox"/> Amendment <input checked="" type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53 | <input type="checkbox"/> Assignment Papers (for an Application) <input type="checkbox"/> Letter to the Official Draftsperson and _____ Sheets of Formal Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ | <input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> LETTER SUBMITTING APPEAL BRIEF AND APPEAL BRIEF (w/clean version of pending claims) <input type="checkbox"/> Appeal Communication to Group (Notice of Appeal, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input type="checkbox"/> Other Enclosure(s) (please identify below): | | |
| <table><tr><td>Remarks</td><td></td></tr></table> | | | Remarks | |
| Remarks | | | | |

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

| | | | | | |
|-------------------------|----------------------------------|---------------|----------------|----------|--------|
| Firm or Individual name | Harness, Dickey & Pierce, P.L.C. | Attorney Name | Gary D. Yacura | Reg. No. | 35,416 |
| Signature | | | | | |
| Date | February 10, 2005 | | | | |

(HDP Ref: 8564-000045/US/DVA)



PATENT
24GA05998-7

IN THE U.S. PATENT AND TRADEMARK OFFICE

Applicant: William E. RUSSELL et al. Conf.: 8107
Appl. No.: 10/608,086 Group: 3641
Filed: June 30, 2003 Examiner: R. Palabrica
For: SYSTEM AND METHOD FOR CONTINUOUS OPTIMIZATION
 OF CONTROL VARIABLES DURING OPERATION OF A
 NUCLEAR REACTOR

AMENDMENT AFTER FINAL

Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

February 10, 2005

Mail Stop AF

Sir:

In reply to the Final Office Action dated November 10, 2004, the following amendments and remarks are submitted. In view of these, Applicants request reconsideration and further examination culminating in a Notice of Allowability.

Amendments to the Claims begin on page 2 of this paper.

Remarks begin on page 5 of this paper.